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C. AMENDMENTS TO THE CLAIMS

In order to better assist the Examiner with the prosecution of the case, the current pending claims have been included in their entirety for which reconsideration is requested.

1. (Currently Amended) A system for enabling remote enterprise management of high availability systems, comprising:

a particular high availability system of a plurality high availability systems
communicatively connected to a remote enterprise server via a network;

said particular high availability system further comprising:

a primary node running a middleware stack for supporting web applications, wherein a plurality of layers of said middleware stack are active, wherein said primary node is assigned a virtual IP address to which requests are directed;

a secondary node running a redundant middleware stack for mirroring said plurality of layers of said middleware stack of said primary node, wherein a first selection of said plurality of layers of said redundant middleware stack are active and a second selection of said plurality of layers of said redundant middleware stack are in standby;

a data replication partition shared between said primary node and said secondary node with data accessible to a selection of said plurality of layers of said active middleware stack, wherein said selection of said plurality of layers of said active middleware stack correspond to said second selection of said plurality of layers of said redundant middleware stack in standby;

a cluster management controller for monitoring a status of said primary node a particular component of said high availability system and responsive to detecting reacting to adjust said high availability system when said status indicating[[es]] an error, transferring said virtual IP address from said primary node to said secondary node, turning off power to said primary node, remounting said data replication partition for access by said secondary node, and activating said second selection of said plurality of layers of said redundant middleware stack requiring access to said data within said data replication partition; and

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a monitoring controller for detecting when said cluster management controller reacts to said error in said primary node status of said particular component and detecting a condition of a plurality of components of said high availability system at a time of said error, wherein said monitoring controller reports said error and said condition of said plurality of components to said remote enterprise server enabled to manage said plurality of high availability systems based on a separate [said] report received from each of said plurality of high availability systems.

2. (Currently Amended) The system according to claim 1 for enabling remote enterprise management of high availability systems, said particular high availability system further comprising:

said primary node and said secondary node each comprising a plurality of servers implementing a J2EE compliant middleware stack monitored by said cluster management controller.

3. (Currently Amended) The system according to claim 1 for enabling remote enterprise management of high availability systems, said cluster management controller further comprising:

a heartbeat monitor for detecting a status of [[a]] said primary node of said particular high availability system.

4. (Currently Amended) The system according to claim 1 for enabling remote enterprise management of high availability systems, said cluster management controller further comprising:

a service monitor daemon for detecting a status of a service provided by [[a]] said middleware layer of said primary node of said particular high availability system.

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5. (Currently Amended) The system according to claim 1 for enabling remote enterprise management of high availability systems, wherein said monitoring controller receives a configuration request from said remote enterprise server and adjusts a configuration for how said cluster management controller will react to adjust said particular high availability system in response to a future error.

6. (Currently Amended) The system according to claim 1 for enabling remote enterprise management of high availability systems, wherein said monitoring controller receives a configuration request from said remote enterprise server and adjusts a hardware configuration of said particular high availability system according to said request.

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7. (Currently Amended) A method for enabling remote enterprise management of high availability systems, comprising:

monitoring a status of ~~[[a]] at least one particular~~ component of a particular high availability system from among a plurality of high availability systems, ~~wherein said particular high availability system is~~ communicatively connected to a remote enterprise server via a network;

running, at a primary node within said particular high availability system, a middleware stack for supporting web applications, wherein a plurality of layers of said middleware stack are active, wherein said primary node is assigned a virtual IP address to which requests are directed;

running, at a secondary node within said particular high availability system, a redundant middleware stack for mirroring said plurality of layers of said middleware stack of said primary node, wherein a first selection of said plurality of layers of said redundant middleware stack are active and a second selection of said plurality of layers of said redundant middleware stack are in standby;

sharing, between said primary node and said secondary node, a data replication partition with data accessible to a selection of said plurality of layers of said active middleware stack, wherein said selection of said plurality of layers of said active middleware stack correspond to said second selection of said plurality of layers of said redundant middleware stack in standby;

responsive to said status indicating an error, reacting to adjust said particular high availability system by transferring said virtual IP address from said primary node to said secondary node, turning off power to said primary node, remounting said data replication partition for access by said secondary node, and activating said second selection of said plurality of layers of said redundant middleware stack requiring access to said data within said data replication partition;

~~detecting when said cluster management controller reacts to said status of said particular component and detecting~~ a condition of a plurality of components of said high availability system at a time of said error; and

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reporting said error and said condition of said plurality of components to said remote enterprise server enabled to manage said plurality of high availability systems based on a separate [said] report received from each of said plurality of high availability systems.

8. (Currently Amended) The method according to claim 7 for enabling remote enterprise management of high availability systems, further comprising:

monitoring said [[a]] status of said component by monitoring said primary node and said secondary node each comprising a plurality of servers implementing a J2EE compliant middleware stack.

9. (Currently Amended) The method according to claim 7 for enabling remote enterprise management of high availability systems, further comprising:

monitoring, by a heartbeat monitor, the status of said [[a]] primary node of said high availability system.

10. (Currently Amended) The method according to claim 7 for enabling remote enterprise management of high availability systems, further comprising:

detecting, by a service monitor daemon, a status of a service provided by [[a]] said middleware layer of said primary node of said particular high availability system.

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11. (Currently Amended) The method according to claim 7 for enabling remote enterprise management of high availability systems, further comprising:

receiving a configuration request from said remote enterprise server; and

adjusting a configuration for how said cluster management controller will react to adjust said particular high availability system in response to a future error.

12. (Currently Amended) The method according to claim 7 for enabling remote enterprise management of high availability systems, further comprising:

receiving a configuration request from said remote enterprise server; and

adjusting a hardware configuration of said particular high availability system according to said request.

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13. (Currently Amended) A computer program product, residing on a computer readable medium, for enabling remote enterprise management of high availability systems, comprising:

means for monitoring a status of [[a]] at least one particular component of a particular high availability system from among a plurality of high availability systems, wherein said particular high availability system is communicatively connected to a remote enterprise server via a network;

means for running, at a primary node within said particular high availability system, a middleware stack for supporting web applications, wherein a plurality of layers of said middleware stack are active, wherein said primary node is assigned a virtual IP address to which requests are directed;

means for running, at a secondary node within said particular high availability system, a redundant middleware stack for mirroring said plurality of layers of said middleware stack of said primary node, wherein a first selection of said plurality of layers of said redundant middleware stack are active and a second selection of said plurality of layers of said redundant middleware stack are in standby; and

means for sharing, between said primary node and said secondary node, a data replication partition with data accessible to a selection of said plurality of layers of said active middleware stack, wherein said selection of said plurality of layers of said active middleware stack correspond to said second selection of said plurality of layers of said redundant middleware stack in standby;

means, responsive to said status indicating an error, for reacting to adjust said particular high availability system by transferring said virtual IP address from said primary node to said secondary node, turning off power to said primary node, remounting said data replication partition for access by said secondary node, and activating said second selection of said plurality of layers of said redundant middleware stack requiring access to said data within said data replication partition; and;

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means for detecting ~~when said cluster management controller reacts to said status of said particular component and~~ detecting a condition of a plurality of components of said high availability system at said time of said error; and

means for reporting said error and said condition of said plurality of components to said remote enterprise server enabled to manage said plurality of high availability systems based on a separate [said] report received from each of said plurality of high availability systems.

14. (Currently Amended) The computer program product according to claim 13 for enabling remote enterprise management of high availability systems, further comprising:

means for monitoring said [[a]] status of said component by monitoring said primary node and said secondary node each comprising a plurality of servers implementing a J2EE compliant middleware stack.

15. (Currently Amended) The computer program product according to claim 13 for enabling remote enterprise management of high availability systems, further comprising:

means for monitoring, by a heartbeat monitor, the status of said [[a]] primary node of said high availability system.

16. (Currently Amended) The computer program product according to claim 13 for enabling remote enterprise management of high availability systems, further comprising:

means for detecting, by a service monitor daemon, a status of a service provided by [[a]] said middleware layer of said primary node of said particular high availability system.

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17. (Currently Amended) The computer program product according to claim 13 for enabling remote enterprise management of high availability systems, further comprising:

means for receiving a configuration request from said remote enterprise server; and

means for adjusting a configuration for how said cluster management controller will react to adjust said particular high availability system in response to a future error.

18. (Currently Amended) The computer program product according to claim 13 for enabling remote enterprise management of high availability systems, further comprising:

means for receiving a configuration request from said remote enterprise server; and

means for adjusting a hardware configuration of said particular high availability system according to said request.

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19. (Currently Amended) A system for remotely configuring a plurality of high availability systems, comprising:

a plurality of high availability systems communicatively connected to a network, each of said plurality of high availability systems further separately comprising:

a primary node running a middleware stack for supporting web applications, wherein a plurality of layers of said middleware stack are active, wherein said primary node is assigned a virtual IP address to which requests are directed;

a secondary node running a redundant middleware stack for mirroring said plurality of layers of said middleware stack of said primary node, wherein a first selection of said plurality of layers of said redundant middleware stack are active and a second selection of said plurality of layers of said redundant middleware stack are in standby;

a data replication partition shared between said primary node and said secondary node with data accessible to a selection of said plurality of layers of said active middleware stack, wherein said selection of said plurality of layers of said active middleware stack correspond to said second selection of said plurality of layers of said redundant middleware stack in standby;

a cluster management controller for monitoring a status of said primary node and responsive to said status indicating an error, transferring said virtual IP address from said primary node to said secondary node, turning off power to said primary node, remounting said data replication partition for access by said secondary node, and activating said second selection of said plurality of layers of said redundant middleware stack requiring access to said data within said data replication partition;

a monitoring controller for detecting monitored information about a plurality of components of each separate one of said plurality of high availability systems at a same time as said status indicates an error; and

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a remote enterprise server communicatively connected to said network, wherein said remote enterprise server receives said monitored information about each of said plurality of high availability systems from each said separate monitoring controller, analyzes said monitored information, and sends requests for reconfiguration to each of said plurality of high availability systems which submit monitored information indicating errors which can be adjusted by reconfiguration.

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